Attorney Docket No.: Q83961

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No.: 10/510,685

AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs [0050] and [0051] with the following two amended paragraphs: [0050] As it may be observed in FIG. 1, several up-link transmissions (e.g., transmission y and transmission z) towards a single (or redundant) digital direct broadcasting satellite (2) may be multiplexed by the on-board processor (21) of the satellite (2) into one down-link bit stream (e.g., transmission yz) which is transmitted towards a plurality of computation centers (3). [0051] The adapter (7) at the computation unit (C) is able to extract data received from a given set of monitoring stations or station equipment (4) from a digital channel provided by receiver (6) as extracted from down-link satellite multiplex. Therefore all the receivers (6) and thus all the adapters (7) can receive data stream (e.g., transmission yz) containing data from the remote monitoring stations (4), all at the same time provided of course they are under the satellite coverage. Nevertheless at each adapter (7), only the data related to the respective computation center (3) (e.g., transmission y or transmission z) is extracted and provided thereto.

Please replace paragraph [0061] with the following amended paragraph:

FIG. 4 shows a block diagram representing an example of an up-link adapter (5) in more detail. It is readily appreciated from the figure that the general structure of this adapter is substantially similar to that of a down-link adapter as shown in FIG. 3, e.g., with front-panel display (50), channel synchronizer (51), and sub-channel synchronizer (52.n), although individual sub-channels have their dedicated input. In FIG. 4, the input (OUT/IN) of the adapter (5) is connected to a remote monitoring station equipment (4) (FIG. 1), whilst a broadcast station (1) is connected at the output port (OUT). The adapter (5) preferably has a front-panel keyboard

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q83961

U.S. Application No.: 10/510,685

and a port (CTL) to a standard video terminal unit for default setting and debug. The remote monitoring station equipment (4) thus can load station/channels/sub-channels configuration table(s) into a down-link adapter management processor (59) through a main up-link adapter protocol manager (58.0), preferably using IP connection suite. The processor (59) can then feed the broadcast station (1) sub-channel header data through port (SCH) using channel/sub-channel arrangement information according to configuration consistent with the one used by the down-link adapter. Each monitoring or monitoring chain of monitoring stations (4) is connected to one of the (OUT/IN) port(s) through an associated protocol manager (58.n).